

REPORT
OF THE
DEPARTMENT OF SANITATION
OF THE
ISTHMIAN CANAL COMMISSION
FOR THE
YEAR 1910

W. C. GORGAS


Colonel, Medical Corps, U. S. Army
Chief Sanitary Officer, Ancon, Canal Zone

WASHINGTON
GOVERNMENT PRINTING OFFICE
1911

614.0986
I87a

UNIVERSITY
OF FLORIDA
LIBRARY





Digitized by the Internet Archive
in 2010 with funding from
Lyrasis Members and Sloan Foundation

REPORT
OF THE
DEPARTMENT OF SANITATION
OF THE
ISTHMIAN CANAL COMMISSION
FOR THE
YEAR 1910

W. C. CORGAS
Colonel, Medical Corps, U. S. Army
Chief Sanitary Officer, Ancon, Canal Zone

WASHINGTON
GOVERNMENT PRINTING OFFICE
1911

614.0986

I 872

CONTENTS.

	Page.
Letter of transmittal.....	5
Vital statistics:	
Deaths of employees of the Isthmian Canal Commission and Panama Railroad.....	9
Deaths in the cities of Panama and Colon and the Canal Zone.....	9
Deaths by age, color, and sex.....	10
Deaths by nationality.....	10
Causes of deaths of employees of the Isthmian Canal Commission and Panama Railroad Co.....	11
Deaths of white employees of the Isthmian Canal Com- mission and the Panama Railroad Co.....	14
Deaths of white women and children from the United States.....	15
Death rate among Americans on the Isthmus.....	17
Causes and places of deaths of employees and civil popula- tion	17
Discharges and deaths of employees in hospitals of the com- mission.....	22
Consolidated hospital report	27
Consolidated sick camp report.....	28
Consolidated report of employees sick in quarters.....	29
Consolidated hospital, sick camp, and sick-in-quarters report.....	29
Consolidated dispensary report	30
Average number of employees constantly sick in hospitals, sick camps, and quarters.....	30
Average number of days' treatment per employee in hospitals, sick camps, and quarters.....	31
Subsistence and operating expenses.....	32
Outside patients treated in hospitals, and amounts collected for their treatment.....	33
Surgical operations performed in hospitals.....	33
Operations and work performed in eye, ear, nose, and throat clinics.....	35
Consolidated ward laboratory report of all hospitals.....	37
Report of:	
Ancon Hospital.....	38
Colon Hospital.....	39
Culebra Hospital.....	40
Palo Seco Leper Asylum.....	41
Taboga Sanitarium.....	42
Santo Tomas Hospital.....	43
Board of health laboratory.....	44
Issues of quinine.....	45

Sanitation:	Page.
Panama.....	46
Colon (including Cristobal, Mount Hope, and Toro Point).....	47
Quarantine service:	
Panama-Ancon and Colon-Cristobal	48
Bocas del Toro.....	49
Personnel report.....	49
Hospital cases of malaria among employees.....	50

LETTER OF TRANSMITTAL.

ISTHMIAN CANAL COMMISSION,
DEPARTMENT OF SANITATION,
Ancon, Canal Zone, January 25, 1911.

CHAIRMAN AND CHIEF ENGINEER,
ISTHMIAN CANAL COMMISSION,
Culebra, Canal Zone.

SIR: I have the honor to submit the following report of the department of sanitation for the calendar year 1910.

The improved health conditions shown in the report for 1909 continue, as is shown by the following table:

	Number of employees.	Deaths.	Rate.
1904.....	6, 213	82	13. 26
1905.....	16, 512	427	25. 86
1906.....	26, 547	1, 105	41. 73
1907.....	39, 238	1, 131	28. 74
1908.....	43, 891	571	13. 01
1909.....	47, 167	502	10. 64
1910.....	50, 802	558	10. 98

The slight increase in the death rate over that of 1909 is due to the increased number of deaths from external violence, the death rate from disease being less than that of 1909.

The death rate among our white employees from the United States from disease was 2.63 per thousand. If we include American women and children, it will raise the death rate of Americans from disease to 3.64 per thousand. This shows an improvement over the year 1909, when the death rate for the above was 3.88 and 4.32 per thousand, respectively.

Taking special diseases, the deaths from typhoid fever among our employees have been:

	Deaths.
1905.....	12
1906.....	42
1907.....	98
1908.....	19
1909.....	13
1910.....	13

Considering dysentery, we have had among our employees from this disease the following deaths:

	Deaths.
1905.....	14
1906.....	69
1907.....	48
1908.....	16
1909.....	8
1910.....	21

Among our 13,021 white employees we had only 1 death from this disease.

Considering pneumonia, we have had among our employees from this disease the following deaths:

	Deaths.
1905.....	95
1906.....	413
1907.....	328
1908.....	93
1909.....	70
1910.....	73

Considering deaths from malaria among employees, we see the following figures:

	Deaths.
1905.....	86
1906.....	233
1907.....	154
1908.....	73
1909.....	52
1910.....	50

This is the "smallest" number of deaths we have had from malaria, and there is a marked improvement in the admission rate to our hospitals, as shown by the following table:

	Per thousand.
1904.....	125
1905.....	514
1906.....	821
1907.....	424
1908.....	282
1909.....	215
1910.....	187

Deaths from the other principal diseases were as follows: Abscess of the liver, 9; nephritis, acute and chronic, 39; and from all forms of tuberculosis, 74; leaving 102 deaths among employees from all other diseases and 177 deaths from external violence.

Considering the death rate of the total population, including the cities of Panama and Colon and the Canal Zone, we find the rates for the different years to be as follows:

	Rate.
1905.....	49.94
1906.....	48.37
1907.....	33.63
1908.....	24.83
1909.....	18.19
1910.....	21.18

' One death from yellow fever, in the person of a young Englishman, occurred at Ancon Hospital on January 24, 1910. The deceased arrived in Panama on the 6th of the month and was taken ill on the 8th. Information was received that he left the ship while in the harbor of Cartagena and visited the native town, and it was there that he undoubtedly got his infection.

With this exception no cases of yellow fever, plague, or smallpox occurred on the Isthmus during the year.

Very respectfully,

W. C. GORGAS,
Chief Sanitary Officer.

78431—11—2

ANNUAL REPORT

OF THE

DEPARTMENT OF HEALTH, ISTHMIAN CANAL COMMISSION,

FOR THE YEAR 1910.

VITAL STATISTICS.

DEATHS OF EMPLOYEES OF THE ISTHMIAN CANAL COMMISSION AND PANAMA RAILROAD CO.

Color.	Average number of em- ployees.	Total number of deaths from—			Annual death rate per 1,000 from—		
		Dis- ease.	Vio- lence.	All causes.	Dis- ease.	Vio- lence.	All causes.
White.....	13,021	64	55	119	4.92	4.22	9.14
Colored.....	37,781	317	122	439	8.39	3.23	11.62
Total.....	50,802	381	177	558	7.50	3.48	10.98

DEATHS IN THE CITIES OF PANAMA AND COLON, AND THE CANAL ZONE.

Places.	Population.	Deaths.	Annual average per 1,000.
Panama.....	45,591	1,446	31.72
Colon.....	19,535	514	26.31
Canal Zone.....	86,465	1,251	14.47
Total.....	151,591	3,211	21.18

NOTE.—The figures relating to the number of employees are compiled from the pay rolls of the different months of the year. The population and deaths as given for the cities of Panama, Colon, and the Canal Zone include employees and civil population.

Total admissions of employees to hospitals and sick camps,
including those sick in quarters..... 45,965
Average per thousand of admissions of employees to hos-
pitals and sick camps, including those sick in quarters.. 905

DEATHS BY AGE, COLOR, AND SEX.

Age.	White.		Colored.		Yellow.		Total.	
	M.	F.	M.	F.	M.	F.	M.	F.
Under 1 year	93	59	459	352	2	2	554	413
1 to 4 years	16	21	109	118	2	2	127	141
5 to 10 years	6	4	26	20	.....	.....	32	24
11 to 20 years	12	.....	108	61	1	.....	121	61
21 to 30 years	75	15	403	168	15	.....	493	183
31 to 40 years	72	17	228	95	12	.....	312	112
41 to 50 years	51	18	173	56	4	.....	228	74
51 to 60 years	30	8	81	36	6	.....	117	44
61 to 70 years	5	4	30	24	4	.....	39	28
71 to 80 years	3	2	18	8	2	.....	23	10
81 to 90 years	2	2	6	3	.....	.....	8	5
91 to 100 years .....	.....	.....	1	1	.....	.....	1	1
101 to 110 years .....	.....	.....	1	.....	.....	.....	1	.....
Unknown	2	4	44	7	2	.....	48	11
Total	367	154	1,687	949	50	4	2,104	1,107

DEATHS BY NATIONALITY.

Nations.	Employees.	Nonemploy- ees.	Total.
Africa	1	1	2
Antigua	8	11	19
Argentina .....	.....	1	1
Australia	1	.....	1
Austria .....	.....	1	1
Bahama Islands	3	1	4
Barbados	163	188	351
Brazil	1	.....	1
Bulgaria	1	.....	1
Canada .....	.....	2	2
China .....	.....	52	52
Colombia	16	136	152
Costa Rica	2	9	11
Cuba	2	7	9
Curacao .....	.....	2	2
Demerara	2	5	7
Denmark .....	.....	3	3
Dominican Republic .....	.....	1	1
Dutch West Indies .....	.....	1	1
Ecuador	1	6	7
England	1	9	10
Finland .....	.....	1	1
Fortune Island	10	.....	10
France .....	.....	12	12
Germany .....	.....	4	4
Greece	9	1	10
Grenada	15	21	36

DEATHS BY NATIONALITY—Continued.

Nations.	Employees.	Nonemploy- ees.	Total.
Guadeloupe.....	17	11	28
Guiana, British.....	1	3	4
Haiti.....	2	3	5
India.....	1	3	4
Italy.....	11	10	21
Jamaica.....	114	520	634
Martinique.....	26	66	92
Mexico.....	1	6	7
Montserrat.....	8	8	16
Nevia.....	1	.....	1
Nicaragua.....	1	3	4
Norway.....	1	1	2
Panama.....	14	1,329	1,343
Peru.....	2	3	5
Porto Rico.....	.....	1	1
Portugal.....	1	.....	1
Russia.....	.....	1	1
San Salvador.....	.....	2	2
St. Domingo.....	1	1	2
St. Kitts.....	6	4	10
St. Lucia.....	11	68	79
St. Martins.....	1	.....	1
St. Thomas.....	1	2	3
St. Vincent.....	4	4	8
Spain.....	51	44	95
Sweden.....	.....	2	2
Syria.....	.....	2	2
Trinidad.....	8	18	26
Turks Island.....	1	1	2
United States.....	35	42	77
Venezuela.....	1	2	3
West Indies, British.....	.....	1	1
Unknown.....	1	17	18
Total.....	558	2,653	3,211

CAUSES OF DEATHS OF EMPLOYEES OF THE ISTHMIAN CANAL COM-
MISSION AND PANAMA RAILROAD.

Causes of death.	White.	Colored.	Total.
<i>Disease.</i>			
Alcoholism, acute and chronic.....	2	.....	2
Anæmia.....	.....	1	1
Aneurism.....	1	1	2
Apoplexy.....	3	2	5

CAUSES OF DEATHS OF EMPLOYEES OF THE ISTHMIAN CANAL COMMISSION AND PANAMA RAILROAD--Continued.

Causes of death.	White.	Colored.	Total.
<i>Disease—Continued.</i>			
Appendicitis.....		1	1
Brain:			
Softening of.....		1	1
Tumor of.....	1		1
Cancer of intestines, peritoneum, and rectum.....		1	1
Cancer and other malignant tumors of buccal cavity.....	1		1
Cancer of organs not specified.....		1	1
Cerebrospinal fever.....	1		1
Cholangitis superative.....	1		1
Colitis, acute and chronic.....		1	1
Congestion and hemorrhage of the brain.....	1		1
Diabetes.....		1	1
Dementia præcox.....		1	1
Dysentery.....	1	12	13
Amœbic.....		2	2
Clinical.....		6	6
Emphysema, pulmonary.....		2	2
Empyema.....		1	1
Encephalomalacia, acute.....		1	1
Diarrhea and enteritis.....		1	1
Epilepsy.....		1	1
Fever:			
Hemoglobinuric.....	5	1	6
Malaria.....	2	19	21
Malaria, estivo-autumnal.....	8	15	23
Typhoid.....	1	12	13
Heart:			
Acute rupture of.....		1	1
Organic disease of.....	1	10	11
Hemorrhage, gastric.....		1	1
Infection of unknown origin.....		10	10
Intestinal obstruction.....		3	3
Liver:			
Abscess of.....	4	5	9
Hydatid tumor of.....	1		1
Lungs:			
Abscess of.....	1		1
Gangrene of.....		2	2
Meningitis:			
Pneumococcus.....		1	1
Tuberculous.....		3	3
Simple.....	1	1	2
Myomalacia.....		3	3

CAUSES OF DEATHS OF EMPLOYEES OF THE ISTHMIAN CANAL COM-
MISSION AND PANAMA RAILROAD—Continued.

Causes of death.	White.	Colored.	Total.
<i>Disease—Continued.</i>			
Nephritis:			
Acute.....		5	5
Chronic.....	4	30	34
Other tumors (lymphoma).....		1	1
Pellagra.....	1	1	2
Peritonitis, simple.....		5	5
Pneumonia.....	10	63	73
Pyæmia.....	2	4	6
Pyæmia and septicæmia, pneumo- coccic.....		2	2
Senility.....		1	1
Septicæmia.....	2	1	3
Septicæmia, purulent infection...	2	3	5
Splenic anemia.....	1		1
Syphilis.....	2		2
Tetanus.....		2	2
Tuberculosis:			
General.....	1	9	10
Pulmonary.....	3	37	40
Miliary.....		4	4
Abdominal.....		4	4
Disseminated.....		16	16
Ulcer, duodenal.....		2	2
Undiagnosed.....		3	3
<i>Violence.</i>			
Accidental traumatisms, various...	11	30	41
Burns and scalds.....		1	1
Drowning, accidental.....	3	17	20
Dynamite explosions.....	1		1
Electric shock.....	3	6	9
Homicides.....	3	6	9
Railroad accidents.....	29	59	88
Suicides.....	3		3
Poisoning by food.....		1	1
Other acute poisonings.....	1	1	2
Other external violence.....	1	1	2
Total.....	119	439	558

DEATHS OF WHITE EMPLOYEES FROM THE UNITED STATES DURING 1910.

JANUARY.

Name.	Division.	Time on Isthmus.	Age.	Cause of death.
Brown, John E.....	Engineering...	7 months..	26	Railroad traumatism.
Bork, Fred A.....	.....do.....	33 months.	29	Cerebral hemorrhage.
Thorne, Charles L..	.....do.....	4 years....	29	Suicide (firearms).

FEBRUARY.

Obdrett, Ernest....	Engineering...	2 years....	30	Accidental traumatism.
Turner, Robert.....	.....do.....	.....	38	Accidental trauma (dynamite).

MARCH.

Cole, W. R.....	Engineering...	32 months.	39	Suicide (firearms).
Gardner, George....	.....do.....	4 years....	51	Dysentery, amœbic.
McGurn, H. D.....	.....do.....	32 months.	25	Electric shock.
McKenna, L. F.....	Examination of accounts.	6 months..	24	Tuberculosis, pulmonary.

APRIL.

Cottrell, R.....	Engineering...	4 years....	30	Tuberculosis, pulmonary.
Fake, L. E.....	Mechanical....	1 month....	31	Accidental traumatism.
Geary, L. D.....	Engineering...	5 years....	53	Septicæmia.
Hart, F. W.....	.....	3 years....	38	Liver, abscess of, amœbic.

MAY.

Barry, John M.....	Civil administration.	2½ years...	41	Organic disease of heart.
Clark, James F.....	.....	30 months.	24	Railroad traumatism.
Healy, Anna.....	Panama R. R.	1 year.....	35	Organic disease of heart.
Howard, Robert E..	Examination of accounts.	16 months.	28	Railroad traumatism.

JULY.

Ames, Lamont.....	Atlantic division.	1 year.....	60	Bright's disease.
-------------------	--------------------	-------------	----	-------------------

AUGUST.

Hobart, Joseph....	Engineering...	7 weeks...	42	Accidental trauma (dynamite).
Jackson, John.....	.....do.....	13 months.	13	Railroad traumatism.
Ridley, Arthur G...	.....do.....	4 years, 2 months.	38	Fall from cement wall.
Tinsley, Elias C....	Panama R. R.	4 years....	46	Railroad traumatism.
Tafel, Harry.....	.....do.....	4 months..	24	Poisoning by acid.

DEATHS OF WHITE EMPLOYEES FROM THE UNITED STATES DURING 1910—Continued.

SEPTEMBER.

Name.	Division.	Time on Isthmus.	Age.	Cause of death.
Coit, John J.	Transportation department.	.....	36	Railroad traumatism.
Haven, Fred B.	Mechanical department.	5 years....	33	Syphilis of cerebellum.
Siegle, William.....	Atlantic division.	7 months..	27	Traumatism by machines.

OCTOBER.

Halstead, W. S.	Chairman's office.	4 years....	28	Amœbic abscess of liver.
Lynch, James.	Pacific division.	6 months..	38	Acute alcoholism.
Schaberle, John A. .	Chairman's office.	2 years....	33	Homicide by firearms.

NOVEMBER.

Tate, Dexter.	Quartermaster's department.	5 years....	43	Suicide by firearms.
--------------------	-----------------------------	-------------	----	----------------------

DECEMBER.

Brady, Walter H. H.	Sanitary department.	5 years, 7 months.	32	Traumatism by fall.
Crawford, John.....	Mechanical division.	5 years....	51	Chronic nephritis.
Dabbs, John S.	Atlantic division.	16 months.	21	Staphylococcus septicæmia.
Evans, J. D.	Panama R. R.	18 months.	23	Splenic anæmia.
Murphy, A. R.	Mechanical division.	4½ years...	56	Sarcoma of right parotid gland.

DEATHS OF WHITE WOMEN AND CHILDREN FROM THE UNITED STATES DURING 1910.

JANUARY.

Name.	Time on Isthmus.	Age.	Cause of death.
Collins, Mrs. H. S.	18 months.	21 years...	Septicæmia, puerperal.
Fox, Mrs. B. J. ....	.....	23 years...	Do.
Tucker, Richard B.	3 months..	3 months..	Enterocolitis.
Walker, John. ....	.....	7 years....	Meningitis, tuberculosis.

DEATHS OF WHITE WOMEN AND CHILDREN FROM THE UNITED STATES DURING 1910—Continued.

FEBRUARY.

Name.	Time on Isthmus.	Age.	Cause of death.
Metcalf, Betty.....	22 months.	22 months.	Paralysis, cerebral.
Wood (infant).....	3 days.....	3 days.....	Hemorrhage, cerebral.

MARCH.

Clayborn (infant).....	1 day.....	1 day.....	Asthenia.
Stewart, Agnes Georgia .	17 months.	47 years...	Convulsions of unknown origin

MAY.

Graham, Mrs. S. E.....	18 months.	74 years...	Nephritis, chronic.
Patterson, Mrs. J. A.....	9 months..	45 years...	Carcinoma of pelvis.

JUNE.

Lloyd, Mrs. H. M.....	1 year.....	22 years...	Septicæmia.
Russell (infant).....	3 days.....	3 days.....	Malnutrition.

JULY.

Arthur, Guy Everard...	19 months	19 months.	Malaria.
Monley, Solomon.....	3 months..	3 months..	Dysentery.
Reidman, Karl.....	18 months	3 years....	Diphtheria and nephritis.
Thompson (infant).....	1 day.....	1 day.....	Premature birth.

AUGUST.

Albright, Marion Ruth..	16 months.	19 months.	Pneumonia.
Murwin, Mrs. W. H.....	.....	26 years...	Burns; explosion of alcohol lamp.

SEPTEMBER.

Scribner, L. May.....	3 years....	38 years...	General peritonitis.
-----------------------	-------------	-------------	----------------------

OCTOBER.

Harbinson, J.....	10 months.	34 years...	Acute infectious jaundice.
-------------------	------------	-------------	----------------------------

NOVEMBER.

Butz (infant).....	1 hour.....	1 hour.....	Atelectasis, congenital.
Gibson, Bessie M.....	4 years.....	31 years...	Asphyxiation (accidental).

DECEMBER.

Smith, Mrs. R.....	3 years....	32 years...	Burns.
Woodburn, Mrs. Effie...	6 months.	42 years...	Acute nephritis.

DEATH RATE AMONG AMERICANS ON THE ISTHMUS.

	Number of deaths.	Annual average per 1,000.
Average number of white employees from the United States, 6,079:		
Disease.....	16	2.63
Violence.....	19	3.13
All causes.....	35	5.76
Average number of white women and children from United States, 4,097:		
Disease.....	21	5.13
Violence.....	3	.73
All causes.....	24	5.86
Average number of white employees and their families from the United States, 10,176:		
Disease.....	37	3.64
Violence.....	22	2.16
All causes.....	59	5.80

CAUSES AND PLACES OF DEATH OF EMPLOYEES AND CIVIL
POPULATION.

Diseases.	Ancon Hos- pital.	Colon Hos- pital.	Pan- ama.	Colon.	Zone.	Total.
<i>I. General diseases.</i>						
Typhoid fever.....	10	8	2		5	25
Malaria.....	1		131	12	56	200
Malaria fever:						
Estivo-autumnal.....	46	10	1	2	21	80
Clinical.....					1	1
Cachexia.....			5		1	6
Hemoglobinuric fever.....	10		1		1	12
Measles.....			3		1	4
Whooping cough.....	1		8			9
Diphtheria and croup.....	1		1			2
Influenza.....			1			1
Miliary fever.....			1			1
Cholera nostras.....					2	2
Dysentery.....	3	13	33	2	17	68
Amoebic.....	8			1	1	10
Bacillary.....		1				1
Clinical.....	26					26
Yellow fever.....	1					1
Leprosy.....					3	3
Erysipelas.....			2			2
Purulent infection and septi- cæmia.....	1					1
Pyæmia.....	5	4	1			10
Septicæmia.....	5	4	6	2	3	20
Pyæmia and septicæmia, pneumococcic.....	3					3
Tetanus.....	1	3	12	2		18
Pellagra.....		5				5
Beriberi.....			41			41

CAUSES AND PLACES OF DEATH OF EMPLOYEES AND CIVIL
POPULATION—Continued.

Diseases.	Ancon Hos- pital.	Colon Hos- pital.	Pan- ama.	Colon.	Zone.	Total.
<i>I. General diseases—Continued.</i>						
Tuberculosis of the lungs.....	37	44	179	27	42	329
Acute miliary tuberculosis.....	7	3	1	1	1	13
Tuberculous meningitis.....	5	.....	2	2	.....	9
Abdominal tuberculosis.....	4	1	3	2	2	12
Pott's disease.....	.....	1	.....	.....	.....	1
Tuberculosis:	.....	.....	.....	.....	.....	.....
Of bones and joints.....	1	.....	.....	.....	.....	1
Of the larynx.....	.....	.....	2	.....	.....	2
Of other organs.....	.....	.....	1	.....	.....	1
Disseminated tuberculosis.....	46	5	.....	.....	.....	51
Rickets.....	1	.....	5	.....	.....	6
Syphilis.....	.....	.....	5	1	.....	6
C. Tertiary.....	1	1	.....	.....	.....	2
D. Hereditary.....	.....	.....	1	.....	4	5
Gonorrheal ophthalmia.....	.....	.....	1	.....	.....	1
Cancer and other malignant tumors:	.....	.....	.....	.....	.....	.....
Of the buccal cavity.....	1	.....	2	.....	.....	3
Of the stomach and liver..	1	.....	3	.....	2	6
Of the peritoneum, intes- tines, rectum.....	1	.....	.....	.....	.....	1
Of the female genital organs.	.....	1	7	.....	.....	8
Of the breast.....	.....	.....	.....	2	.....	2
Other organs and of organs not specified.....	1	1	10	.....	1	13
Other tumors (tumors of the female genital organs ex- cepted).....	1	.....	1	.....	.....	2
Acute articular rheumatism.....	.....	.....	5	.....	.....	5
Chronic rheumatism and gout.....	.....	.....	1	.....	.....	1
Scurvy.....	.....	.....	1	.....	.....	1
Diabetes.....	1	1	.....	.....	.....	2
Addison's disease.....	.....	.....	1	.....	.....	1
Anemia:	.....	.....	.....	.....	.....	.....
Chlorosis.....	2	.....	1	.....	.....	3
Primary, pernicious.....	.....	1	.....	.....	.....	1
Alcoholism:	.....	.....	.....	.....	.....	.....
Acute or chronic.....	1	1	7	1	.....	10
Acute.....	1	.....	2	1	.....	4
Alcoholic psychosis.....	1	.....	.....	.....	.....	1
<i>II. Diseases of the nervous sys- tem and of the organs of special sense.</i>						
Encephalitis.....	1	.....	.....	1	.....	2
Simple meningitis.....	7	.....	20	.....	.....	27
Cerebrospinal fever.....	.....	3	.....	2	.....	5
Pneumococcus meningitis.....	2	2	.....	.....	1	5
Lateral sclerosis.....	.....	.....	1	.....	.....	1
Other diseases of the spinal cord.	1	.....	2	.....	.....	3
Cerebral hemorrhage, apoplexy.	2	3	20	8	7	40
Softening of the brain.....	1	4	.....	.....	.....	5
Paralysis without specified cause.....	1	.....	6	.....	.....	7
Other forms of mental aliena- tion.....	6	.....	.....	.....	.....	6
Epilepsy.....	1	.....	2	2	2	7
Convulsions (nonpuerperal)...	1	.....	1	.....	1	3
Convulsions of infants.....	.....	.....	1	7	9	17
Hysteria.....	.....	.....	1	.....	.....	1

CAUSES AND PLACES OF DEATH OF EMPLOYEES AND CIVIL
POPULATION—Continued.

Diseases.	Ancon Hos- pital.	Colon Hos- pital.	Pan- ama.	Colon.	Zone.	Total.
<i>II. Diseases of the nervous system and of the organs of special sense—Continued.</i>						
Neuralgia.....			1			1
Neuritis.....			1			1
Tumor of the brain.....	1	1				2
Other diseases of the nervous system.....		1				1
<i>III. Diseases of the circulatory system.</i>						
Pericarditis.....	2				1	3
Acute endocarditis.....		1	19		1	21
Organic disease of the heart.....	13	9	43	16	11	92
Angina pectoris.....			4	3		7
Aneurism.....	2	1	2		1	6
Arterio-sclerosis.....	1	2	7		1	11
Other diseases of the arteries.....			2			2
Embolism, thrombosis.....	2	2	2			6
Varices.....			1			1
Other diseases of the veins.....		1			1	2
Pupura hemorrhagica.....	1				2	3
Other hemorrhages: other diseases of the circulatory system.....	1		3		2	6
<i>IV. Diseases of the respiratory system.</i>						
Myiasis of nasal fossæ and sinuses.....	1					1
Other diseases of nasal fossæ.....					1	1
Other diseases of the larynx.....			1			1
Acute bronchitis.....			48	15	5	68
Chronic bronchitis.....			8	2		10
Broncho-pneumonia.....	7	3	22	9	29	70
Pneumonia (unqualified).....	1		49	14	31	95
Lobar pneumonia.....	49	33	3	2	16	103
Pleurisy.....			7	3	1	11
Empyema.....	2	2				4
Pulmonary congestion, pulmonary apoplexy.....	1		18	1		20
Gangrene of the lungs.....	3					3
Asthma.....			2		1	3
Pulmonary emphysema.....			1		1	2
Abscess of lungs.....		2				2
Other diseases of the respiratory system (tuberculosis excepted).....		1	1	1	1	4
<i>V. Diseases of the digestive system.</i>						
Diseases of the teeth and gums.....					1	1
Stomatitis.....			1			1
Other diseases of the mouth and annæxa.....		1			1	2
Acute gastritis.....			4	3	3	10
Chronic gastritis.....				1	1	2
Acute indigestion.....				2		2
Other diseases of the stomach (cancer excepted).....			4			4

CAUSES AND PLACES OF DEATH OF EMPLOYEES AND CIVIL
POPULATION—Continued.

Diseases.	Ancon Hos- pital.	Colon Hos- pital.	Pan- ama.	Colon.	Zone.	Total.
<i>V. Diseases of the digestive system—Continued.</i>						
Diarrhea and enteritis (under 2 years).....	5	7	243	73	58	386
Diarrhea and enteritis (2 years and over).....	3	2	37	8	4	52
Ankylostomiasis.....		2	1		6	9
Ascariasis.....					4	4
Other intestinal parasites.....			1		1	2
Appendicitis and typhlitis.....		2	1			3
Hernias, intestinal obstructions.....			5			5
Inguinal hernia.....			1			1
Intestinal obstruction.....	1	2	10		3	16
Diseases of the anus and fecal fistulas.....			3			3
Other diseases of the intestines.....	2					2
Duodenal ulcer.....	3					3
Hydatid tumor of the liver.....	1					1
Cirrhosis of the liver.....	3		9	2	3	17
Abscess of liver (unqualified).....	1	2	3			6
Amebic abscess of the liver.....	8	1				9
Jaundice.....		3			1	4
Other diseases of the liver.....			4	3		7
Other diseases of the spleen.....		1				1
Simple peritonitis (nonpuerperal).....	3	5	6	5	10	29
Other diseases of the digestive system (cancer and tuberculosis excepted).....		2				2
<i>VI. Nonvenereal diseases of the genito-urinary system and annexa.</i>						
Acute nephritis.....	9	3	7	6	6	31
Bright's disease (chronic nephritis).....	42	28	65	10	14	159
Pyelo-nephrosis.....	4	2				6
Diseases of the bladder.....			2			2
Cystitis.....			3	1		4
Other diseases of the urethra, urinary abscess, etc.....			1			1
Hypertrophy of prostate.....			1			1
Uterine hemorrhage (nonpuerperal).....			1			1
Uterine tumor (noncancerous).....	1		1			2
Cysts and other tumors of the ovaries.....	1					1
Salpingitis and other diseases of the female genital organs.....	1					1
<i>VII. The puerperal state.</i>						
Abortion.....			2			2
Puerperal hemorrhage.....	3	2			3	8
Other accidents of labor.....					1	1
Puerperal septicemia.....	3	2	4	2	3	14
Puerperal albuminuria and convulsions.....			1	2	1	4
Eclampsia.....	4	1	1	2		8

CAUSES AND PLACES OF DEATH OF EMPLOYEES AND CIVIL
POPULATION—Continued.

Diseases.	Ancon Hos- pital.	Colon Hos- pital.	Pan- ama.	Colon.	Zone.	Total.
VIII. <i>Diseases of the skin and of the cellular tissue.</i>						
Gangrene.....			2			2
Furuncle.....			1			1
Carbuncle.....			1			1
Acute abscess.....	1					1
Ulcerating granuloma of the pudenda.....	1					1
IX. <i>Diseases of the bones and of the organs of locomotion.</i>						
Caries (nontuberculous).....			2			2
Mastoid abscess.....		1				1
Other diseases of the bones (tu- berculosis excepted).....			1			1
Other diseases of the organs of locomotion.....			1			1
X. <i>Malformations.</i>						
Congenital malformations (still- birth not included).....				1	1	2
XI. <i>Diseases of early infancy.</i>						
Congenital debility, icterus, and sclerema.....	3		15	23	26	67
Premature birth.....	3		15	7	18	43
Other diseases peculiar to early infancy.....	6	3	9	2	7	27
Malnutrition.....	1	2	23	17	59	102
Lack of care.....	1	2	2	4	5	14
Accidents at birth.....	1	1		1	3	6
XII. <i>Old age.</i>						
Senility.....	1		9	1	10	21
XIII. <i>Affections produced by external causes.</i>						
Suicide:						
By poisoning.....				3		3
By firearms.....			1	3	2	6
By cutting or piercing in- struments.....			1			1
By jumping from a high place.....			1			1
Poisoning by food.....					2	2
Venomous bites and stings.....					1	1
Other acute poisonings.....	1			1	1	3
Conflagration.....	1					1
Burns (conflagration excepted).....	4		4	1	2	11
Absorption of deleterious gases (conflagration excepted).....					1	1
Accidental drowning.....			1	2	28	31
Traumatism:						
By firearms.....		1	2		2	5
By cutting or piercing in- struments.....			1			1
By fall.....	1	4			4	9

CAUSES AND PLACES OF DEATH OF EMPLOYEES AND CIVIL
POPULATION—Continued.

Diseases.	Ancon Hos- pital.	Colon Hos- pital.	Pan- ama.	Colon.	Zone.	Total.
<i>XIII. Affections produced by external causes—Continued.</i>						
Traumatism—Continued.						
In mines and quarries.....	3	.....	.....	.....	12	15
By machines.....	2	3	.....	.....	5	10
By other crushings (ve- hicles, railroads, land- slides, etc.).....	23	22	1	1	73	120
Starvation.....	.....	.....	.....	.....	2	2
Electricity (lightning excepted)	.....	.....	.....	.....	9	9
Homicide:						
By firearms.....	2	.....	.....	.....	3	5
By cutting or piercing in- struments.....	.....	.....	.....	1	5	6
By other means.....	.....	1	.....	.....	2	3
Fractures (cause not specified).	.....	.....	6	.....	.....	6
Other external violence.....	.....	1	1	.....	1	3
Legal execution.....	.....	.....	.....	.....	1	1
<i>XIV. Ill-defined diseases.</i>						
Ill-defined organic diseases.....	.....	.....	1	1	1	3
Sudden death.....	.....	.....	2	.....	.....	2
Cause of death not specified or ill-defined.....	6	1	38	2	11	58
Infections of undetermined origin.....	12	6	4	.....	.....	22
Total.....	516	293	1,356	335	711	3,211
Stillbirths.....	3	6	152	45	109	315
Grand total.....	519	299	1,508	380	820	3,526

NOTE.—The deaths occurring in Ancon and Colon Hospitals result from sick-
injury, or other cases taken from the cities of Panama and Colon, or from the Canal
Zone, and in the table of vital statistics are properly credited to either Panama,
Colon, or the Canal Zone.

TABLE SHOWING DISCHARGES AND DEATHS OF EMPLOYEES IN THE
HOSPITALS OF THE ISTHMIAN CANAL COMMISSION, FROM ALL
CAUSES, FOR THE YEAR 1910.

Diseases.	Dis- charged.	Died.
<i>I. General diseases.</i>		
Typhoid fever.....	113	12
Relapsing fever.....	2	.....
Malaria.....	249	.....
Malarial fever:		
Estivo-autumnal.....	4,628	36
Tertian.....	952	.....
Quartan.....	43	.....
Mixed.....	47	1
Undetermined.....	202	.....
Clinical.....	3,268	.....
Cachexia.....	20	.....

TABLE SHOWING DISCHARGES AND DEATHS OF EMPLOYEES IN THE HOSPITALS OF THE ISTHMIAN CANAL COMMISSION, FROM ALL CAUSES, FOR THE YEAR 1910—Continued.

Diseases.	Dis- charged.	Died.
<i>I. General diseases—Continued.</i>		
Hemoglobinuric fever.....	47	6
Vaccinia.....	11	—
Measles.....	15	—
Diphtheria and croup.....	1	—
Influenza.....	307	—
Dysentery.....	10	2
Amoebic.....	51	4
Bacillary.....	2	1
Clinical.....	126	11
Leprosy.....	1	—
Erysipelas.....	5	—
Chicken pox.....	4	—
German measles.....	4	—
Mumps.....	65	—
Yaws.....	3	—
Other epidemic diseases.....	9	—
Purulent infection and septicemia.....	5	4
Pyemia.....	1	5
Septicemia.....	—	4
Pyemia and septicemia, pneumococcic.....	—	2
Tetanus.....	—	2
Pellagra.....	2	2
Beriberi.....	1	—
Tuberculosis of the lungs.....	134	39
Acute miliary tuberculosis.....	—	4
Tuberculous meningitis.....	—	2
Abdominal tuberculosis.....	4	4
Pott's disease.....	7	1
Tuberculosis:		
Of bones and joints.....	8	—
Of the lymph glands.....	9	—
Of the genito-urinary organs.....	9	—
Tuberculous abscess.....	6	—
Tuberculosis of other organs.....	2	—
Disseminated tuberculosis.....	1	26
Syphilis.....	1	—
A. Primary.....	9	—
B. Secondary.....	72	—
C. Tertiary.....	120	1
D. Hereditary.....	1	—
E. Period not stated.....	17	—
Soft chancre.....	231	—
Adenitis chancroidal.....	464	—
Gonococcus infection.....	98	—
Gonorrhea.....	331	—
Gonorrheal arthritis.....	34	—
Gonorrheal ophthalmia.....	11	—
Cancer and other malignant tumors:		
Of the buccal cavity.....	1	—
Of the stomach and liver.....	1	—
Of the peritoneum, intestines, rectum.....	1	1
Of the skin.....	3	—
Of other organs and of organs not specified.....	7	2
Tumor of brain.....	1	—
Other tumors (tumors of the female genital organs excepted).....	31	1
Acute articular rheumatism.....	36	—
Chronic rheumatism and gout.....	15	—
Arthritis deformans.....	2	—
Muscular rheumatism.....	56	—
Diabetes.....	5	1
Addison's disease.....	1	—

TABLE SHOWING DISCHARGES AND DEATHS OF EMPLOYEES IN THE HOSPITALS OF THE ISTHMIAN CANAL COMMISSION, FROM ALL CAUSES, FOR THE YEAR 1910—Continued.

Diseases.	Discharged.	Died.
<i>I. General diseases—Continued.</i>		
Anemia, chlorosis.....	66	1
Chlorosis.....	1	.....
Anemia, primary, pernicious.....	18	.....
Other general diseases.....	4	.....
Alcoholism:		
Acute or chronic.....	40	.....
Acute.....	58	2
Alcoholic psychosis.....	13	.....
Other chronic poisonings.....	1	.....
<i>II. Diseases of the nervous system and of the organs of special sense.</i>		
Simple meningitis.....	1	6
Locomotor ataxia.....	1	.....
Other diseases of the spinal cord.....	6	2
Cerebral hemorrhage, apoplexy.....	4	6
Softening of the brain.....	1	1
Paralysis without specified cause.....	13	.....
General paralysis of the insane.....	1	.....
Other forms of mental alienation.....	30	1
Epilepsy.....	18	1
Hysteria.....	7	.....
Neuralgia.....	33	.....
Neuritis.....	84	.....
Tumor of the brain.....	.....	1
Neurasthenia.....	149	.....
Other diseases of the nervous system.....	68	1
Follicular conjunctivitis.....	4	.....
Trachoma.....	3	.....
Other diseases of the eye and its annexa.....	710	.....
Diseases of the ear.....	176	.....
<i>III. Diseases of the circulatory system.</i>		
Pericarditis.....	1	.....
Acute endocarditis.....	6	.....
Organic disease of the heart.....	44	11
Aneurism.....	7	2
Arterio-sclerosis.....	21	.....
Other diseases of the arteries.....	18	.....
Hemorrhoids.....	120	.....
Varices.....	17	.....
Varicocele.....	41	.....
Phlebitis.....	1	.....
Other diseases of the veins.....	7	.....
Lymph adenitis (nonvenereal).....	150	.....
Other diseases of the lymphatic system.....	38	.....
Other hemorrhages; other diseases of the circulatory system.....	.....	1
<i>IV. Diseases of the respiratory system.</i>		
Adenoid vegetations.....	10	.....
Inflammation of accessory nasal sinuses.....	45	.....
Myiasis of nasal fossæ and sinuses.....	20	.....
Other diseases of nasal fossæ.....	184	.....
Laryngitis.....	5	.....
Other diseases of the larynx.....	2	.....
Diseases of the thyroid body.....	2	.....
Acute bronchitis.....	317	.....
Chronic bronchitis.....	63	.....

TABLE SHOWING DISCHARGES AND DEATHS OF EMPLOYEES IN THE HOSPITALS OF THE ISTHMIAN CANAL COMMISSION, FROM ALL CAUSES, FOR THE YEAR 1910—Continued.

Diseases.	Discharged.	Died.
IV.— <i>Diseases of the respiratory system</i> —Continued.		
Broncho-pneumonia.....	28	4
Pneumonia (unqualified).....	10	1
Lobar pneumonia.....	176	63
Pleurisy.....	122	2
Empyema.....	11	2
Pulmonary congestion, pulmonary apoplexy.....	4	.....
Gangrene of the lungs.....	.....	3
Asthma.....	50	.....
Pulmonary emphysema.....	20	.....
Other diseases of the respiratory system (tuberculosis excepted).....	12	.....
V. <i>Diseases of the digestive system.</i>		
Diseases of the teeth and gums.....	19	.....
Stomatitis.....	6	.....
Other diseases of the mouth and annexa.....	45	.....
Pharyngitis.....	82	.....
Follicular tonsilitis.....	85	.....
Other diseases of the pharynx.....	65	.....
Foreign body in the esophagus.....	1	.....
Ulcer of the stomach.....	9	.....
Acute gastritis.....	26	.....
Chronic gastritis.....	35	.....
Acute indigestion.....	76	.....
Other diseases of the stomach (cancer excepted).....	17	.....
Diarrhea and enteritis (2 years and over).....	166	3
Ankylostomiasis.....	56	.....
Ascariasis.....	6	.....
Tapeworm.....	6	.....
Strongyloides.....	5	.....
Other intestinal parasites.....	9	.....
Appendicitis and typhlitis.....	197	1
Hernias, intestinal obstructions.....	15	2
Hernia, inguinal.....	225	.....
Other hernias.....	27	.....
Intestinal obstruction.....	.....	1
Diseases of the anus and fecal fistulas.....	45	.....
Other diseases of the intestines.....	95	.....
Duodenal ulcer.....	7	2
Hydatid tumor of the liver.....	.....	1
Cirrhosis of the liver.....	40	.....
Biliary calculi.....	5	.....
Abscess of the liver (unqualified).....	8	1
Amoebic abscess of the liver.....	5	7
Cholecystitis.....	8	.....
Jaundice.....	30	.....
Other diseases of the liver.....	18	1
Other diseases of the spleen.....	3	1
Simple peritonitis (nonpuerperal).....	4	2
Other diseases of the digestive system (cancer and tuberculosis excepted).....	4	.....
VI. <i>Nonvenereal diseases of the genito-urinary system and annexa.</i>		
Acute nephritis.....	32	5
Bright's disease (chronic nephritis).....	176	29
Movable kidney.....	2	.....
Pyelo-nephrosis.....	2	.....
Other diseases of the kidney and annexa.....	7	.....

TABLE SHOWING DISCHARGES AND DEATHS OF EMPLOYEES IN THE HOSPITALS OF THE ISTHMIAN CANAL COMMISSION, FROM ALL CAUSES, FOR THE YEAR 1910—Continued.

Diseases.	Dis- charged.	Died.
<i>VI. Nonvenereal diseases of the genito-urinary system and annexa—Continued.</i>		
Calculi of the urinary passages.....	14	.....
Diseases of the bladder.....	10	.....
Cystitis.....	33	.....
Stricture of the urethra.....	89	.....
Other diseases of the urethra, urinary abscess, etc.....	14	.....
Acute prostatitis.....	2	.....
Chronic prostatitis.....	4	.....
Abscess of the prostate.....	1	.....
Other diseases of the prostate.....	1	.....
Hematocele.....	2	.....
Hydrocele.....	72	.....
Lymph scrotum and varix.....	5	.....
Other nonvenereal diseases of the male genital organs.....	173	.....
Uterine hemorrhage (nonpuerperal).....	1	.....
Metritis.....	2	.....
Other diseases of the uterus.....	5	.....
Cysts and other tumors of the ovaries.....	2	.....
Salpingitis and other diseases of the female genital organs.....	1	.....
Nonpuerperal diseases of the breast (cancer excepted).....	1	.....
<i>VII. The puerperal state.</i>		
Normal labor.....	1	.....
Abortion.....	1	.....
<i>VIII. Diseases of the skin and of the cellular tissue.</i>		
Gangrene.....	1	.....
Furuncle.....	79	.....
Carbuncle.....	22	.....
Acute abscess.....	164	.....
Phlegmon.....	7	.....
Trichophytosis.....	2	.....
Scabies.....	7	.....
Other diseases of the skin and annexa.....	335	.....
Pemphigus contagiosus.....	1	.....
Mycetoma.....	1	.....
Filaria medinensis.....	3	.....
Elephantiasis.....	6	.....
Myiasis of skin.....	2	.....
Dhobie itch.....	26	.....
Ulcer of the skin.....	162	.....
Tropical ulcer.....	6	.....
Ainhum.....	2	.....
Impetigo contagiosa.....	5	.....
<i>IX. Diseases of the bones and of the organs of locomotion.</i>		
Caries (nontuberculous).....	6	.....
Mastoid abscess.....	9	.....
Osteomyelitis.....	5	.....
Periostitis.....	14	.....
Other diseases of the bones (tuberculosis excepted).....	26	.....
Ankylosis.....	3	.....
Arthritis.....	89	.....
Synovitis.....	43	.....
Other diseases of the joints (tuberculosis and rheumatism excepted).....	42	.....
Amputations.....	161	.....
Other diseases of the organs of locomotion.....	85	.....

TABLE SHOWING DISCHARGES AND DEATHS OF EMPLOYEES IN THE HOSPITALS OF THE ISTHMIAN CANAL COMMISSION, FROM ALL CAUSES, FOR THE YEAR 1910—Continued.

Diseases.	Discharged.	Died.
<i>X. Malformations.</i>		
Congenital malformations (still birth not included).....	7	.....
<i>XI. Affections produced by external causes.</i>		
Poisoning by food.....	48	.....
Venomous bites and stings.....	2	.....
Snake bites.....	1	.....
Other acute poisonings.....	3	.....
Burns (conflagration excepted).....	109	3
Traumatism:		
By firearms.....	6	.....
By cutting or piercing instruments.....	101	.....
By fall.....	40	4
In mines and quarries.....	1,373	7
By machines.....	183	4
By other crushings (vehicles, railroads, landslides, etc.)....	363	33
Overexertion.....	1	.....
Heat exhaustion.....	1	.....
Electricity (lightning excepted).....	3	.....
Homicide by firearms.....		2
Dislocations.....	24	.....
Sprains.....	228	.....
Fractures (cause not specified).....	461	1
Other external violence.....	11	.....
<i>XII. Ill-defined diseases.</i>		
Ill-defined organic diseases.....	21	.....
Cause of disease or death not specified or ill-defined.....	87	.....
No disease, feigned disease.....	51	.....
Infections of undetermined origin.....	42	9
Total.....	21,568	404

CONSOLIDATED HOSPITAL REPORT.

Hospitals.	Re-main-ing Jan. 1.		Admitted.		Died.		Dis-charged.		Trans-ferred.		Re-main-ing Dec. 31.	
	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
<i>Ancon Hospital.</i>												
Employees.....	244	268	8,489	8,351	47	212	5,683	8,037	2,756	76	247	294
Nonemployees.....	54	54	1,954	1,398	39	184	1,807	1,166	79	34	83	68
Insane.....	28	218	47	252	3	31	31	122	10	50	31	267
Total.....	326	540	10,490	10,001	89	427	7,521	9,325	2,845	160	361	629
<i>Colon Hospital.</i>												
Employees.....	103	183	3,184	2,613	32	103	2,603	2,095	569	500	83	98
Nonemployees.....	39	50	706	910	17	141	652	700	12	50	34	69
Total.....	142	233	3,890	3,523	49	244	3,255	2,795	581	550	117	167

CONSOLIDATED HOSPITAL REPORT—Continued.

Hospitals.	Re- main- ing Jan. 1.		Admitted.		Died.		Dis- charged.		Trans- ferred.		Re- main- ing Dec. 31.	
	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
<i>Culebra Hospital.</i>												
Employees.....	1	1	3	1	.....	.....	2	1	2	1	.....	.....
Nonemployees.....	4	7	100	262	.....	2	96	239	6	22	2	6
Total.....	5	8	103	263	.....	2	98	240	8	23	2	6
<i>Palo Seco Leper Asylum.</i>												
Employees.....	.....	1	1	3	.....	.....	.....	4	.....	.....	1	.....
Nonemployees.....	1	32	.....	11	.....	3	.....	6	.....	.....	1	34
Total.....	1	33	1	14	.....	3	.....	10	.....	.....	2	34
<i>Taboga Sanitarium.</i>												
Employees.....	57	.....	3,191	.....	.....	.....	3,164	.....	33	.....	51	.....
Nonemployees.....	5	.....	761	.....	.....	.....	756	.....	2	.....	8	.....
Total.....	62	.....	3,952	.....	.....	.....	3,920	.....	35	.....	59	.....
Grand total:												
Employees.....	405	453	14,868	10,968	79	315	11,452	10,137	3,360	577	382	392
Nonemployees.....	103	143	3,521	2,581	56	330	3,341	2,111	99	106	128	177
Insane.....	28	218	47	252	3	31	31	122	10	50	31	267
Total.....	536	814	18,436	13,801	138	676	14,824	12,370	3,469	733	541	836

CONSOLIDATED SICK CAMP REPORT.

Stations.	Re- main- ing Jan. 1.		Admitted.		Died.		Dis- charged.		Trans- ferred.		Re- main- ing Dec. 31.	
	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Ancon.....	8	3	463	396	.....	.....	460	382	11	17	.....	.....
Balboa.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Corozal.....	1	.....	78	150	.....	.....	51	86	28	64	.....	.....
Miraflores.....	12	3	689	568	.....	.....	521	465	167	103	3	3
Pedro Miguel.....	3	7	550	667	.....	.....	397	524	147	145	9	5
Paraiso.....	2	.....	212	355	2	.....	186	290	26	65	.....	.....
Culebra.....	1	3	503	659	1	.....	326	333	171	323	7	5
Empire.....	8	.....	326	692	.....	.....	265	545	54	150	7	5
Las Cascadas.....	3	4	569	462	1	3	445	386	123	74	3	3
Bas Obispo.....	2	5	464	545	3	.....	367	430	98	109	1	8
Gorgona.....	.....	.....	176	590	1	.....	138	455	38	126	.....	8
San Pablo.....	1	12	468	533	.....	.....	347	417	114	122	8	6
Tabernilla.....	5	4	544	1,152	.....	.....	410	907	129	243	10	6
Frijoles.....	4	.....	.....	302	.....	.....	.....	236	.....	70	.....	.....
Bohio.....	2	.....	1	99	.....	.....	1	59	.....	42	.....	.....
Gatun.....	4	19	1,913	3,120	1	.....	1,235	2,068	672	1,062	19	8
Cristobal.....	10	.....	309	951	1	.....	211	613	96	338	2	9
Porto Bello.....	8	4	429	593	1	1	319	434	113	155	4	7
Nombre de Dios.....	.....	1	29	159	.....	.....	25	150	4	10	.....	.....
Toro Point.....	.....	.....	103	172	.....	.....	96	156	5	13	2	3
Total.....	38	91	7,826	12,165	2	13	5,800	8,936	1,996	3,231	66	76

CONSOLIDATED REPORT OF EMPLOYEES SICK IN QUARTERS.

Stations.	Days excused for quarters.		New patients excused for quarters.	
	White.	Colored.	White.	Colored.
Ancon.....	736	.....	297	.....
Balboa.....	423	45	314	43
Corozal.....	466	.....	254	.....
Miraflores.....	109	57	74	42
Pedro Miguel.....	733	40	383	13
Paraíso.....	710	8	251	6
Culebra.....	1,057	161	462	83
Empire.....	1,616	33	590	14
Las Cascadas.....	835	3	301	1
Bas Obispo.....	452	.....	156	.....
Gorgona.....	2,898	.....	1,422	.....
San Pablo.....	233	1	89	1
Tabernilla.....	306	4	132	3
Frijoles.....	69	73	28	47
Bohío.....	26	8	13	6
Gatun.....	1,975	2	975	1
Cristobal.....	3,664	3,806	1,631	799
Porto Bello.....	479	.....	275	.....
Nombre de Dios.....	126	272	76	130
Toro Point.....	274	242	188	189
Total.....	17,187	4,755	7,911	1,378

CONSOLIDATED HOSPITAL, SICK CAMP, AND SICK-IN-QUARTERS REPORT.

	Remain- ing Jan. 1.		Admitted.		Died.		Dis- charged.		Trans- ferred.		Remain- ing Dec. 31.	
	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Hospitals.....	536	814	18,436	13,801	138	676	14,824	12,370	3,469	733	541	836
Sick camps.....	38	91	7,826	12,165	2	13	5,800	8,936	1,996	3,231	66	76
Total.....	574	905	26,262	25,966	140	689	20,624	21,306	5,465	3,964	607	912

	White.	Colored.	Total.
Total admissions to hospitals and sick camps.....	26,262	25,966	52,228
Number of employees sick in quarters.....	7,911	1,378	9,289
Total.....	34,173	27,344	61,517
Less number of patients transferred from sick camps to hospitals, and from hospitals to sanitarium, whose admissions are duplicated in above figures..	5,465	3,964	9,429
Net admissions to hospitals and sick camps, and those sick in quarters.....	28,708	23,380	52,088

CONSOLIDATED DISPENSARY REPORT.

Stations.	Employees.		Nonemployees.		Total.	
	White.	Colored.	White.	Colored.	White.	Colored.
Ancon.....	6,909	11,838	2,207	1,868	9,116	13,706
Balboa.....	12,330	16,394	2,921	1,270	15,251	17,664
Corozal.....	8,965	5,809	2,666	508	11,631	6,317
Miraflores.....	9,062	10,955	207	467	9,269	11,422
Pedro Miguel.....	15,285	13,242	2,137	1,268	17,422	14,510
Paraíso.....	4,558	3,870	2,930	1,283	7,788	5,153
Culebra.....	22,404	19,277	9,352	7,252	31,756	26,529
Empire.....	17,578	20,946	9,146	6,390	26,724	27,336
Las Cascadas.....	11,192	7,623	5,881	3,274	17,073	10,897
Bas Obispo.....	18,707	16,381	3,110	2,146	21,817	18,527
Gorgona.....	25,125	22,807	7,409	4,785	32,534	27,592
San Pablo.....	7,193	6,692	851	1,382	8,044	8,074
Tabernilla.....	7,499	7,415	1,540	1,499	9,039	8,914
Frijoles.....	1,703	7,109	22	334	1,725	7,443
Bohío.....	372	4,392	106	3,097	478	7,489
Gatun.....	36,790	46,064	3,577	2,263	40,367	48,327
Cristobal.....	20,182	22,405	6,910	4,189	27,092	26,594
Porto Bello.....	9,223	12,262	242	261	9,465	12,523
Nombre de Dios.....	1,163	2,780	31	2,021	1,194	4,801
Toro Point.....	3,854	3,972	117	66	3,971	4,038
Total.....	240,394	262,233	61,362	45,623	301,756	307,856

AVERAGE NUMBER OF EMPLOYEES CONSTANTLY SICK IN HOSPITALS, SICK CAMPS, AND QUARTERS.

	Hospitals.		
	White.	Colored.	Total.
Ancon Hospital.....	316.02	370.37	686.39
Colon Hospital.....	117.13	139.73	256.86
Culebra Hospital.....	.09	.09	.18
Palo Seco Leper Asylum.....	.17	.73	.90
Taboga Sanitarium.....	66.32	.....	66.32
Total.....	499.73	510.92	1,010.65

	Sick camps.			Sick in quarters.		
	White.	Colored.	Total.	White.	Colored.	Total.
Ancon.....	3.08	2.47	5.55	2.02	.....	2.02
Balboa.....	.....	.....	.....	1.16	.12	1.28
Corozal.....	.33	.67	1.00	1.28	.....	1.28
Miraflores.....	4.22	3.35	7.57	.30	.16	.46
Pedro Miguel.....	5.36	5.81	11.17	2.01	.11	2.12
Paraíso.....	1.91	3.02	4.93	1.95	.02	1.97
Culebra.....	4.27	4.00	8.27	2.90	.44	3.34
Empire.....	2.96	5.59	8.55	4.43	.09	4.52
Las Cascadas.....	5.21	4.37	9.58	2.29	.01	2.30
Bas Obispo.....	4.78	6.19	10.97	1.24	.....	1.24

AVERAGE NUMBER OF EMPLOYEES CONSTANTLY SICK IN HOSPITALS,
SICK CAMPS, AND QUARTERS—Continued.

	Sick camps.			Sick in quarters.		
	White.	Colored.	Total.	White.	Colored.	Total.
Gorgona.....	1.34	5.25	6.59	7.94	.....	7.94
San Pablo.....	5.46	6.45	11.91	.64	.....	.64
Tabernilla.....	4.86	10.44	15.30	.84	.01	.85
Frijoles.....	.....	1.23	1.23	.19	.20	.39
Bohio.....	.....	.44	.44	.07	.02	.09
Gatun.....	12.36	19.04	31.40	5.41	.01	5.42
Cristobal.....	2.91	8.88	11.79	10.04	10.43	20.47
Porto Bello.....	4.25	4.58	8.83	1.31	.....	1.31
Nombre de Dios...	.19	1.21	1.40	.35	.75	1.10
Toro Point.....	3.78	5.43	9.21	1.80	1.59	3.39
Total.....	67.27	98.42	165.69	48.17	13.96	62.13

AVERAGE NUMBER OF EMPLOYEES CONSTANTLY SICK.

	White.	Colored.	Total.
Hospitals.....	499.79	510.92	1,010.65
Sick camps.....	67.27	98.42	165.69
Sick in quarters.....	48.17	13.96	62.13
Total.....	615.17	623.30	1,238.47

AVERAGE NUMBER OF EMPLOYEES CONSTANTLY SICK PER 1,000.

	White.	Colored.	Total.
Hospitals.....	38.38	13.52	19.89
Sick camps.....	5.16	2.61	3.26
Sick in quarters.....	3.70	.37	1.22
Total.....	47.24	16.50	24.37

AVERAGE NUMBER OF DAYS' TREATMENT PER EMPLOYEE IN
HOSPITALS, SICK CAMPS, AND QUARTERS.

Hospitals.	White.	Colored.	Total.
Ancon Hospital.....	13.59	16.24	14.90
Colon Hospital.....	13.34	18.90	15.88
Culebra Hospital.....	8.00	16.00	10.67
Palo Seco Leper Asylum.....	61.00	67.75	83.00
Taboga Sanitarium.....	7.57	.....	7.57
Total.....	12.25	16.91	14.23

AVERAGE NUMBER OF DAYS' TREATMENT PER EMPLOYEE IN
HOSPITALS, SICK CAMPS, AND QUARTERS—Continued.

	Sick camps.			Quarters.		
	White.	Colored.	Total.	White.	Colored.	Total.
Ancon.....	2.39	2.26	2.35	2.48	.....	2.48
Balboa.....	.....	.....	.....	1.35	1.05	1.31
Corozal.....	1.51	1.64	1.60	1.83	.....	1.83
Miraflores.....	2.24	2.15	2.20	1.47	1.36	1.43
Pedro Miguel.....	3.60	3.17	3.36	1.91	3.08	1.95
Paraiso.....	3.29	3.09	3.17	2.33	1.33	2.79
Culebra.....	3.14	2.22	2.62	2.29	1.94	2.23
Empire.....	3.39	2.94	3.08	2.74	2.36	2.73
Las Cascadas.....	3.34	3.44	3.39	2.77	3.00	2.77
Bas Obispo.....	3.75	4.17	3.98	2.90	.....	2.90
Gorgona.....	2.78	3.29	3.17	2.04	.....	2.04
San Pablo.....	4.33	4.37	4.35	2.62	1.00	2.60
Tabernilla.....	3.29	3.31	3.31	2.32	1.33	2.30
Frijoles.....	.....	1.46	1.46	2.46	1.55	1.89
Bohio.....	1.00	1.58	1.58	2.00	1.33	1.79
Gatun.....	2.37	2.22	2.28	2.03	2.00	2.02
Cristobal.....	3.46	3.41	3.42	2.25	4.76	3.07
Porto Bello.....	3.58	2.83	3.15	1.74	.....	1.74
Nombre de Dios...	2.34	2.77	2.70	1.66	2.09	1.93
Toro Point.....	3.45	2.96	3.14	1.46	1.52	1.87
Total.....	3.02	2.83	2.90	2.17	3.45	2.36

SUBSISTENCE AND OPERATING EXPENSES.

	Hospitals.	Sick camps.	Total.
SUBSISTENCE EXPENSES.			
Number of days' rations issued to patients.....	565,124	57,976	623,099
Cost of rations issued to patients.....	\$145,289.01	\$14,114.17	\$159,403.18
Cost of subsistence per patient per day.....	\$0.257	\$0.243	\$0.255
OPERATING EXPENSES.			
Number of days' relief furnished patients.....	565,123	57,976	623,099
Cost of operation.....	\$705,550.19	\$25,921.33	\$731,471.52
Cost per capita per day.....	\$1.25	\$0.45	\$1.17
Cost of operation with amount received from outside patients deducted.....	\$587,278.83	\$25,921.33	\$613,200.16
Cost per capita per day with above deduction.....	\$1.07	\$0.45	\$0.98
Cost of dispensaries.....	\$170,270.12	.....	.....

OUTSIDE PATIENTS TREATED IN HOSPITALS AND AMOUNTS COL-
LECTED FOR THEIR TREATMENT.

	Number of cases treated.	Number of days' relief.	Amount.
Patients for whom the Republic of Panama pays 75 cents per day.....	2,372	66,875	\$50,214.50
Patients for whom the Canal Zone government pays 30 cents per day.....	353	8,925	2,669.40
Patients paying 30 cents per day for themselves..	1,944	20,355	6,106.50
Patients from the Republic of Panama paying other prices.....	1,195	10,622	22,112.30
Patients from the Canal Zone paying other prices.	2,959	22,368	31,367.75
Patients from the Canal Zone not paying.....	2,672	53,575	.....
Patients from the Republic of Panama not pay- ing.....	698	10,572	.....
Total.....	12,193	193,292	112,470.45

NOTE.—Patients carried from one month to another are considered as separate cases in above table.

SURGICAL OPERATIONS PERFORMED IN HOSPITALS.

	Number.	Died.
Amputations:		
Shoulder.....	2	.....
Arm.....	1	.....
Forearm.....	8	.....
Hand.....	4	.....
Thigh.....	20	4
Leg.....	28	1
Foot.....	7	.....
Digits, multiple.....	63	.....
Thigh, double.....	1	.....
Leg, double.....	1	.....
Arm and leg.....	1	1
Operations on bones:		
Craniectomy, decompressive.....	18	6
Craniectomy, exploratory.....	2	.....
Laminectomy.....	5	4
Ostectomy.....	29	.....
Resection of wrist.....	2	.....
Resection of hip.....	1	.....
Wiring of fractures—		
Simple.....	36	.....
Compound.....	25	.....
Adenectomy:		
Cervical.....	27	1
Axillary.....	13	.....
Inguinal—		
Single.....	439	.....
Double.....	95	.....
Femoral.....	22	.....
Herniotomy:		
Inguinal—		
Single.....	168	.....
Double.....	111	.....
Femoral.....	5	.....
Ventral.....	27	.....
Combined (any two of the above).....	3	.....
Strangulated.....	14	1

SURGICAL OPERATIONS PERFORMED IN HOSPITALS—Continued.

	Number.	Died.
Genito-urinary tract:		
Nephrotomy.....	3	1
Nephrectomy.....	2	.....
Nephropexy.....	1	.....
Perinephritic abscess, drainage of.....	2	.....
Urethrotomy—		
Internal.....	47	.....
External.....	65	1
Prostatectomy.....	5	2
Variocele, radical cure.....	42	.....
Hydrocele—		
Single, radical cure.....	85	.....
Double, radical cure.....	22	.....
Orchidectomy.....	22	.....
Epididymotomy.....	33	.....
Vasectomy.....	2	.....
Amputation of penis.....	2	.....
Amputation of penis and scrotum.....	2	.....
Curettage uteri.....	134	.....
Perineoplasty.....	31	.....
Trachelorrhaphy.....	18	.....
Vaginal sections.....	49	1
Vaginal punctures.....	6	.....
Obstetrical:		
Cæsarian section, abdominal.....	3	2
Accouchement force.....	5	.....
High forceps.....	6	.....
Low forceps.....	8	.....
Version.....	6	2
Perineorrhaphy.....	54	.....
Thorax:		
Thoracotomy.....	15	.....
Thoracoplasty.....	1	.....
Excision of breast.....	4	.....
Excision of breast and axilla.....	5	.....
Gunshot wound of chest, operation for.....	1	.....
Stab wound of chest, operation for.....	1	.....
Rectum:		
Hemorrhoids, radical cure.....	147	.....
Fistula in anus, excision of.....	34	1
General:		
Thyroidectomy.....	4	.....
Nerve stretching.....	3	.....
Aneurismorrhaphy.....	2	.....
Varicose veins, excision of.....	10	.....
Tenorrhaphy.....	7	.....
Myorrhaphy.....	5	.....
Excision of surface neoplasms.....	8	.....
Gunshot wound of soft parts, operation for.....	6	.....
Stab wound of soft parts, operation for.....	1	.....
Extensive injuries to soft parts, operation for.....	11	.....
Plastic operation for—		
Congenital defect.....	9	1
Severe injuries.....	13	.....
Effects of disease.....	19	.....
Skin graft.....	51	.....
Laparotomy:		
For general peritonitis.....	15	5
For tuberculous peritonitis.....	6	3
For intestinal obstruction.....	8	2
Exploratory.....	29	4
Gastrotomy.....	1	1
Gastro-enterostomy.....	5	.....
Enterectomy.....	1	1
Enterorrhaphy.....	3	2

SURGICAL OPERATIONS PERFORMED IN HOSPITALS—Continued.

	Number.	Died.
Laparotomy—Continued.		
Appendectomy.....	193	.....
Appendectomy with—		
Local peritonitis.....	25	.....
General peritonitis.....	17	1
Cæcostomy.....	8	1
Colostomy.....	1	1
Sigmoidoexy.....	3	.....
Cholecystotomy.....	5	.....
Cholecystostomy.....	6	.....
Cholecystectomy.....	3	.....
Choledochotomy.....	1	.....
Abscess of liver—		
Laparo-hepatotomy for.....	12	4
Thoraco-hepatotomy for.....	11	5
Splenectomy.....	1	.....
Pan-hysterectomy.....	6	.....
Supravaginal hysterectomy.....	19	.....
Hysteromyomectomy.....	25	.....
Myomectomy.....	9	.....
Salpingectomy:		
Single.....	15	.....
Double.....	8	.....
Salpingo-oophorectomy.....	14	.....
Ovarian cystectomy.....	14	.....
Oophorectomy.....	1	.....
Suspensio-uteri.....	44	.....
Plastic operation for chronic pelvic peritonitis.....	36	1
For ectopic gestation.....	8	.....
For trauma:		
General peritonitis.....	1	1
Hematoperitoneum.....	2	.....
Rupture of liver.....	3	2
Gunshot wound of abdomen.....	2	1
Stab wound of abdomen.....	1	.....
Major operations, various other.....	32	3
Minor operations, various.....	3,791	1
Total.....	6,574	68

OPERATIONS AND WORK PERFORMED IN EYE, EAR, NOSE, AND THROAT CLINICS.

Operations.	Number.	Died.
Adenectomy.....	16	.....
Adenectomy and tonsillectomy.....	77	.....
Adenectomy and tonsillotomy.....	9	.....
Advancement of internal rectus.....	2	.....
Amputation of uvula.....	4	.....
Advancement of external rectus.....	7	.....
Cataract:		
Discission of.....	8	.....
Needling.....	6	.....
Curettage of middle ear.....	1	.....
Dacryocystotomy.....	3	.....
Dilation of lacrimal stricture.....	5	.....
Drainage of—		
Frontal sinus.....	7	.....
Maxillary sinus.....	10	.....
Sphenoid sinus.....	1	.....
Enucleation.....	10	.....

OPERATIONS AND WORK PERFORMED IN EYE, EAR, NOSE, AND
THROAT CLINICS—Continued.

Operations.	Number.	Died.
Evisceration.....	11	.....
Excision, dermoid, cyst, upper lid.....	1	.....
Expression for—		
Follicular conjunctivitis.....	5	.....
Trachoma.....	6	.....
Extraction of cataract.....	9	.....
Grattage of eyelids.....	1	.....
Holsrath-Kuhnt operation for trachoma.....	1	.....
Incision and drainage of—		
Abscess, Calvarian.....	1	.....
Lacrimal sac.....	2	.....
Incision of—		
Dacryocyst.....	2	.....
Furuncle, ear.....	3	.....
Larynx.....	1	.....
Peritonsillar abscess.....	1	.....
Postaural abscess.....	4	.....
Retropharyngeal abscess.....	1	.....
Iridectomy.....	21	.....
Lacrimal canaliculus incised.....	3	.....
Lacrimal duct probed.....	10	.....
Mastoidotomy:		
Simple.....	8	.....
Radical.....	12	.....
Meato-mastoidotomy.....	2	.....
Ossiculectomy.....	4	.....
Osteoplastic, nose.....	3	.....
Paracentesis of—		
Cornea.....	10	.....
Membrana tympani.....	25	.....
Paraffine prosthesis of nose.....	1	.....
Plastic:		
On ear.....	5	.....
On eyelid.....	19	.....
On lip.....	1	.....
On nose.....	10	.....
Pharynx.....	1	.....
Pterygium.....	32	.....
Removal of—		
Bullet from ear.....	1	.....
Bullet from jaw.....	3	.....
Bullet from nose.....	1	.....
Aural polyp.....	3	.....
Cyst, ear.....	2	.....
Nasal polyp.....	16	.....
Nasal spur.....	1	.....
Screw worm from nose.....	1	.....
Necrosed bones.....	1	.....
Uvula polyp.....	1	.....
Sinusotomy, maxillary exploratory.....	1	.....
Submucous resection of nasal septum.....	173	.....
Suture, lacerated sclera.....	1	.....
Tenotomy.....	7	.....
Tonsillectomy.....	87	.....
Tonsillotomy.....	17	.....
Transplanting operation for pterygium.....	24	.....
Turbineotomy.....	16	.....
Various other minor operations.....	986	.....
Total.....	1,721	.....
Refractions.....	2,240	.....
Outside cases treated.....	14,562	.....
Grand total.....	18,523	.....

CONSOLIDATED WARD LABORATORY REPORT OF ALL HOSPITALS.

Blood examinations.....	23, 269
Estivo autumnal.....	6, 634
Tertian—	
Single.....	1, 741
Double.....	164
Mixed tertian and estivo autumnal.....	280
Quartan.....	223
Lepra bacilli.....	2
Differential blood counts.....	1, 520
Leucocyte counts.....	2, 700
Red blood counts.....	329
Red and white blood counts.....	11
Hemoglobin estimations.....	547
Filaria.....	29
Spirilla obermeieri.....	3
Crescents.....	3
Guaiac and turpentine tests for invisible blood.....	71
Stool examinations.....	10, 218
Ascaris lumbricoides.....	574
Uncinaria ova.....	1, 380
Uncinaria worms.....	163
Tricocephalus dispar.....	1, 065
Strongyloides intestinalis.....	393
Tenia.....	16
Tenia saginata.....	2
Ameba.....	361
Ameba coli.....	26
Ameba dysenteria.....	1
Ciliated monads.....	374
Bilharzia.....	10
Pus and blood.....	789
Pus and epithelial cells.....	53
Balantidium coli.....	12
Tubercular bacilli.....	22
Lepra bacilli.....	2
Bacilli coli.....	1
Oxyuris vermicularis.....	1
Entomaoba, hystolitica.....	5
Thymol treatments.....	26
Urine examinations.....	33, 354
Albumen.....	9, 357
Albumen and casts.....	5, 853
Sugar.....	123
Pus and blood.....	812
Gonococci.....	15
Hemoglobin.....	12
Bile.....	3
Diazo reactions.....	35
Microscopical examinations.....	782
Urea estimations.....	117
Dyslococci.....	2
Tubercle bacilli.....	10
Hemin crystals.....	30

Urine examinations—Continued.

Guaiac test.....	75
Glucose.....	3
Red blood cells.....	4
Sputum examinations.....	2, 615
Tubercular bacilli.....	288
Pneumococci.....	6
Miscellaneous:	
Examinations of—	
Pleural effusions	1
Spinal fluid	27
Vaginal and urethral discharges.....	44
Pus, blood, and tissue	324
Various smears and discharges	133
Gastric analysis.....	45

ANCON HOSPITAL.

Class.	Re- main- ing Jan. 1.		Admitted.		Died.		Dis- charged.		Trans- ferred.		Re- main- ing Dec. 31.	
	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Isthmian Canal Commis- sion employees.....	244	197	8, 120	6, 537	43	166	5, 445	6, 276	2, 637	63	239	229
Panama R. R. employees	71	369	1, 814	4	46	238	1, 761	119	13	8	65	
Pay patients.....	49	34	1, 727	850	31	79	1, 608	754	73	16	64	35
Charity patients.....	5	20	227	548	8	105	199	412	6	18	19	33
Insane patients.....	28	218	47	252	3	31	31	122	10	50	31	267
Total.....	326	540	10, 490	10, 001	89	427	7, 521	9, 325	2, 845	160	361	629

Average number of days' treatment per employee for the year:

White.....	13. 59
Colored.....	16. 24
Total.....	14. 90

Average number of employees constantly sick during the year:

White.....	316. 02
Colored.....	370. 37
Total.....	686. 39

Number of days' relief furnished patients.....	394, 703
Cost of subsistence per patient per day.....	\$0. 225

NATIONALITY.

Class.	Number treated.	Americans.		Other nations.	
		White.	Colored.	White.	Colored.
Isthmian Canal Commission employees.....	15, 098	3, 446	16	4, 808	6, 828
Panama R. R. employees.....	2, 254	179	.....	140	1, 935
Pay patients.....	2, 660	1, 070	.....	599	991
Charity patients.....	800	160	1	111	528
Insane patients.....	545	9	.....	51	485
Total.....	21, 357	4, 864	17	5, 709	10, 767

OPERATIONS.

(See report of all surgical operations.)

LABORATORY REPORT.

(See consolidated ward laboratory report.)

COLON HOSPITAL.

Class.	Re-main-ing Jan. 1.		Admit-ted.		Died.		Dis-charged.		Trans-ferred.		Re-main-ing Dec. 31.	
	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Isthmian Canal Commission employees.....	89	121	2, 661	1, 792	29	70	2, 198	1, 464	449	316	74	63
Panama R. R. employees.....	14	62	523	821	3	33	405	631	120	184	9	35
Private pay.....	25	10	533	479	13	54	517	414	4	4	24	17
Municipal pay.....	.....	7	9	43	1	10	8	28	.....	.....	.....	12
Zone charity.....	14	33	164	388	3	77	157	258	8	46	10	40
Total.....	142	233	3, 890	3, 523	49	244	3, 285	2, 795	581	550	117	167

Average number of days' treatment per employee during the year:

White.....	13. 34
Colored.....	18. 90
Total.....	15. 88

Average number of employees constantly sick during the year:

White.....	117. 13
Colored.....	139. 73
Total.....	256. 86

Number of days' relief furnished patients..... 125, 503
 Cost of subsistence per patient per day..... \$0. 266

NATIONALITY.

Class.	Number treated.	Americans.		Other nations.	
		White.	Colored.	White.	Colored.
Isthmian Canal Commission employees.....	4,663	1,278	7	1,339	2,039
Panama R. R. employees.....	1,420	287	1	193	939
Private pay.....	1,047	309	.....	223	515
Municipal pay.....	59	1	.....	5	53
Zone charity.....	599	70	1	98	430
Total.....	7,788	1,945	9	1,858	3,976

OPERATIONS.

(See report of all surgical operations.)

LABORATORY REPORT.

(See consolidated ward laboratory report.)

CULEBRA HOSPITAL.

Class.	Remain- ing Jan. 1.		Admitted.		Died.		Dis- charged.		Trans- ferred.		Remain- ing Dec. 31.	
	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Employees.....	1	1	3	1	.....	2	2	1	2	1	.....	.....
Nonemployees.....	4	7	100	262	.....	2	96	239	6	22	2	6
Total.....	5	8	103	263	.....	2	98	240	8	23	2	6

Average number of days' treatment for employee for the year:

White..... 8.00
Colored..... 16.00

Total..... 10.67

Average number of employees constantly sick during the year:

White..... .09
Colored..... .09

Total..... .18

Number of days' relief furnished patients..... 3,647

Cost of subsistence per patient per day..... \$0.261

NATIONALITY.

Class.	Number treated.	Americans.		Other Nations.	
		White.	Colored	White.	Colored.
Employees.....	6	2	.....	2	2
Nonemployees.....	373	18	4	84	267
Total.....	379	20	4	86	269

OPERATIONS.

(See report of all surgical operations.)

LABORATORY REPORT.

(See consolidated ward laboratory report.)

PALO SECO LEPER ASYLUM.

Class.	Remain- ing Jan. 1.		Ad- mitted.		Died.		Dis- charged.		Trans- ferred.		Remain- ing Dec. 31.	
	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Employees.....		1	1	3				4			1	.....
Pay patients.....	1	21		6		3		2			1	22
Charity patients.....		11		5				4				12
Total.....	1	33	1	14		3		10			2	34

Average number of days' treatment per employee for the year:

White.....	61.00
Colored.....	67.75
Total.....	83.00

Average number of employees constantly sick during the year:

White.....	0.17
Colored.....	.73

Total.....	.90
Number of days' relief furnished patients.....	12,302
Cost of subsistence per patient per day.....	\$0.337

NATIONALITY.

Class.	Number treated.	Americans.		Other nations.	
		White.	Colored.	White.	Colored.
Employees.....	5	1	.....	.....	4
Pay patients.....	28	.....	.....	1	27
Charity patients.....	16	.....	.....	.....	16
Total.....	49	1	.....	1	47

TABOGA SANITARIUM.

Class.	Remaining Jan. 1.		Admitted.		Died.		Discharged.		Transferred.		Remaining Dec. 31.	
	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.	W.	C.
Employees.....	57	.....	3,191	.....	.....	.....	3,164	.....	33	.....	51	.....
Families of employees.....	5	.....	761	.....	.....	.....	756	.....	2	.....	8	.....
Totals.....	62	.....	3,952	.....	.....	.....	3,920	.....	35	.....	59	.....

Average number of days' treatment per employee for the year.....	7. 57
Average number of employees constantly sick during the year.....	66. 32
Number of days' relief furnished patients.....	28,968
Cost of subsistence per patient per day.....	\$0. 625

NATIONALITY.

Class.	Number treated.	Americans.	Other nations.
Employees.....	3,248	2,036	1,212
Families of employees.....	766	743	23
Total.....	4,014	2,779	1,235

NOTE.—No colored patients treated at Taboga Sanitarium.

SANTO TOMAS HOSPITAL.

Class.	Re- main- ing Jan. 1.	Ad- mitted.	Died.	Dis- charged.	Trans- ferred.	Re- main- ing Dec. 31.
Pay patients.....	14	1,227	19	1,200	.....	22
Charity patients.....	220	5,014	390	4,607	.....	237
Total.....	234	6,241	409	5,807	.....	259

Average number of days' treatment per patient.....	15.22
Average number of patients constantly sick.....	259.13
Number of days' relief furnished patients.....	94,581
Cost of subsistence per patient per day.....	\$0.314

NATIONALITY.

Class.	Number treated.	Americans.		Other nations	
		White.	Col- ored.	White.	Col- ored.
Pay patients.....	1,241	.....	.....	298	943
Charity patients.....	5,234	.....	.....	935	4,299
Total.....	6,475	.....	.....	1,233	5,242

OPERATIONS.

	Number.	Died.
Major.....	614	18
Minor.....	1,275	.....
Total.....	1,889	18

DISPENSARY.

Class.	White.	Colored.	Total.
Natives.....	275	707	982
Foreigners.....	139	225	364
Total.....	414	932	1,346

BOARD OF HEALTH LABORATORY.

Bacteriological examinations:	
Municipal water supplies.....	99
Water from—	
Streams and springs.....	27
Condensers.....	210
Reservoirs, creeks and rivers.....	8
Filters.....	13
Cultures from pustules of arm.....	1
Blood cultures.....	333
Throat cultures (diphtheria suspects).....	193
Cultures from autopsies.....	111
Cultures from eye.....	6
Stools.....	382
Urine.....	359
Sputum.....	13
Pus.....	15
Testicle.....	1
Hydrocele fluid.....	2
Kneejoint fluid.....	11
Gall-bladder fluid.....	3
Spinal fluid.....	7
Various smears and specimens.....	81
Milk for tubercular bacilli.....	13
Soil for bacilli coli.....	12
Pleural fluid.....	1
Cultures from nose and mouth.....	14
Quinine tonic (new formula).....	1
Blood.....	1
Treponema palladium.....	2
Scrapings from hands.....	1
Joint fluid.....	1
Ulcers on buttock, etc.....	2
Cultures from operating room.....	6
Fluid from patellar bursa.....	1
Determinations:	
Chlorine content in water.....	15
Specific gravity of metal.....	1
Specific gravity of sea water.....	1
Examinations:	
Leper suspects.....	47
Mosquitoes, identification of.....	2
Post-mortems—	
Calves.....	1
Cows.....	5
Horses.....	1
Mules.....	2
Rats and fleas.....	2
Dogs.....	4
Yaws suspect.....	2
Sections.....	14

Chemical examinations:

Blood stains.....	3
Stomach contents.....	18
Urine.....	54
Water, reservoir.....	8
Various liquids, fluids, etc.....	90
Water, for determination of dissolved oxygen.....	23
Various metals.....	6
Deposit on boiler.....	1
Agglutination reactions.....	240
Autopsies.....	712
Bodies embalmed.....	62
Hydrophobia, preventive treatment.....	4
Medico-legal post-mortems.....	3
Sections of tissue prepared—	
Frozen.....	104
Paraffin.....	7,345
Surgical pathological tissue and neoplasms reported.....	159
Vaccine inoculations, antityphoid.....	79
Vaccine treatment, autogenous.....	32
Water—	
Microscopical examination of.....	69
Sanitary analysis of.....	122
Urinometer calibrated.....	1
Microscopical examination of lesions on feet.....	1
Wasserman reactions.....	158

NOTE.—Studies in relation to malaria. Preparation of typhoid immune serum. Investigation of cases of illness at Gatun. Sanitary survey of the villages of Chame and Chorrera. Efficiency test of trazo-ratin. Study of an antiothonaus can of oriental sore. Investigation of reported outbreak of smallpox in the towns of Chitre, Los Santos, and Guarare, Republic of Panama. Report on rats and fleas in their relation to bubonic plague.

ISSUES OF QUININE.

Months.	Kilograms.	Pounds avoirdupois.
January.....	61.20	134.92
February.....	23.25	51.26
March.....	38.10	84.00
April.....	239.60	528.22
May.....	29.50	65.03
June.....	56.50	124.56
July.....	156.10	344.14
August.....	74.70	164.68
September.....	66.30	146.16
October.....	204.00	449.74
November.....	49.00	108.03
December.....	48.50	106.92
Total.....	1,046.75	2,307.66
Average per month.....	87.23	192.31

SANITATION—CITY OF PANAMA.

Anopheles brigade:

Linear feet of ditches cleaned.....	1, 336, 440
Linear feet of ditches dug.....	5, 300
Square feet of weeds and grass cut and removed...	1, 408, 390
Cesspools cleaned.....	271
Cesspools filled.....	63
Loads of refuse removed from the city.....	7, 584
Wells filled.....	8
Cubic yards of earth used in filling cesspools, wells, and holes.....	883
Number of houses on which gutters have been cor- rected.....	331
Linear feet of gutters repaired or punched.....	15, 031
Linear feet of gutters removed.....	5, 118

Disinfection brigade:

Houses disinfected and fumigated for—

Beriberi.....	15
Diphtheria.....	2
Malaria fever.....	1
Pernicious fever.....	10
Tuberculosis.....	50
Chicken pox.....	8
Mumps.....	1
Scarlet fever.....	2
At request of Panama Government.....	4
Leprosy.....	2
Houses disinfected for typhoid fever.....	1

Houses fumigated for—

Yellow fever.....	5
Measles.....	2
Number of cubic feet disinfected and fumigated...	4, 879, 895
Number of rooms fumigated and disinfected.....	1, 021

Material used:

Crude oil.....gallons..	6, 180
Larvacide.....do.....	9, 470

Destruction of rats:

Number of rats caught and killed.....	12, 846
Average number of rattraps in use daily.....	445
Poisons placed.....	3, 300

Inspection of houses and yards:

Houses and yards inspected.....	1, 552
Persons notified to keep premises in good condition..	674
Warning notices complied with.....	581
Number of letters to alcalde requesting enforcement of sanitary rules and regulations.....	115
Number of shacks, stables, and old buildings con- demned and demolished.....	28

**New buildings: Number of plans submitted to health
officer and approved.....**

387

SANITATION—COLON, CRISTOBAL, MOUNT HOPE, TORO POINT.

Medical inspection:

Number of cases reported by medical inspectors...	94
Number of cases inspected.....	94
Number of cases sent to hospital.....	94

Water and sewers:

Number of connections made during the year.....	69
Total number of connections made to date.....	615
Number of outstanding permits.....	254
Number of houses in which extensions were made.....	70

Houses:

Plans approved	67
Permits to repair issued.....	308
Permits to occupy issued.....	58
Temporary permits to occupy issued.....	15
Number of houses in which defective plumbing fixtures were found and reported to the superintendent of public works.....	1, 692

Sanitation of Colon:

Average number of cans of garbage removed daily.	2, 368
Number of—	
Loads of yard garbage removed.....	2, 706
Acres of vegetation removed.....	421
Acres of streets cleaned.....	2, 644
Private properties cleaned.....	4, 823
Square yards of pools oiled.....	180, 150
Mosquito-breeding places found.....	2, 534
Dogs killed.....	5
Water receptacles treated.....	388, 260
Linear feet of ditches constructed.....	7, 060
Linear feet of ditches maintained.....	206, 124
Nuisances abated.....	6, 833
Buildings inspected.....	67, 070
Rats killed.....	157
Alleys cleaned.....	25, 219
Square yards of alleys cleaned.....	133, 325
Acres of streets sprinkled.....	276
Crab holes worked.....	38, 200
Notice to abate nuisances served.....	8, 714
Colon and Cristobal garbage disposed of at the Ninth Street dump.	

Sanitation of Cristobal (including Beach Island):

Number of—	
Square yards of pools oiled.....	42, 490
Water receptacles treated.....	58, 840
Mosquito breeding places found.....	398
Crab holes worked.....	1, 800
Linear feet of ditches constructed.....	11, 383
Linear feet of ditches maintained.....	6, 044
Square yards of vegetation removed.....	383

Sanitation of Mount Hope:

Number of—

Square yards of pools oiled	393, 600
Water receptacles treated	360, 704
Linear feet of ditches maintained	244, 948
Crab holes worked	10, 200
Mosquito-breeding places found	1, 925
Linear feet of ditches constructed	20, 047

Mount Hope cemetery maintained.

Sanitation of Toro Point:

Number of—

Square yards of pools oiled	320, 470
Water receptacles treated	52, 213
Mosquito-breeding places found	1, 110
Linear feet of ditches constructed	39, 663
Linear feet of ditches maintained	42, 345
Square yards of vegetation removed	1, 325
Crab holes worked	3, 000
Doses of quinine tonic distributed	28, 505
Cubic yards of ditches constructed	1, 893

QUARANTINE SERVICE.

PORTS OF PANAMA-ANCON AND COLON-CRISTOBAL.

Number of vessels inspected and passed	1, 186
Number of vessels detained in quarantine	10
Number of vessels fumigated on arrival (one disinfected) ..	65
Number of vessels fumigated prior to departure	27
Number of pieces of baggage disinfected	1, 417
Number of crew inspected	96, 689
Number of passengers inspected	58, 796
Total number of persons inspected	155, 485
Number of persons vaccinated at ports of arrival because of compulsory vaccination law	11, 437
Number of persons vaccinated at ports of departure or en route because of compulsory vaccination law	16, 094
Total number of persons vaccinated	27, 531
Number of persons held in quarantine at the detention stations to complete period of incubation of yellow fever or plague	4, 540
Number of persons held in quarantine on board vessels to complete period of incubation of yellow fever or plague ..	6, 041
Total number of persons held in quarantine	10, 581
Number of persons landed from foreign ports:	
Cabin	19, 600
Steerage	21, 851
	<hr/> 41, 451
Number of persons embarked for foreign ports:	
Cabin	17, 530
Steerage	17, 319
	<hr/> 34, 849

Apparent increase for the year from foreign ports:

Cabin.....	2, 070	
Steerage.....	4, 532	
		6, 602
Number of persons arriving from coast towns on small craft.		31, 039
Number of persons embarked for coast towns on small craft.		25, 151
Apparent increase for the year from coast towns.....		5, 888
Total number of persons landed.....		72, 490
Total number of persons embarked.....		60, 000
Excess over number embarked.....		12, 490
Less number for Pacific ports.....		2, 404
Total apparent increase for the year.....		10, 086
Number of immigrants recommended for rejection.....		116
Number of certificates issued to outgoing passengers.....		725
Number of persons refused certificates because of trachoma.....		74
Number of bills of health viséed.....		511

BOCAS DEL TORO.

Number of vessels inspected and passed.....	410
Number of crew inspected and passed.....	15, 882
Number of passengers inspected and passed.....	6, 477
Number of passengers, in transit, inspected and passed..	2, 103
Number of persons held to complete period of incubation of yellow fever.....	1, 874

PERSONNEL REPORT.

[Average number of employees at work during the year.]

Chief sanitary office.....	43
Property division.....	10
Quarantine service.....	39
Health office, Panama.....	61
Health office, Colon.....	118
Acon hospital.....	538
Colon hospital.....	171
Santo Tomas hospital.....	5
Taboga sanitarium.....	24
Palo Seco leper ayslum.....	14
Zone sanitation.....	252
Dispensaries:	
Ancon.....	4
Balboa.....	3
Bas Obispo.....	8
Bohio.....	4
Corozal.....	3
Cristobal.....	8
Culebra.....	13
Empire.....	10
Gatun.....	18
Gorgona.....	8

Dispensaries—Continued.

Las Cascadas.....	8
Miraflores	5
Nombre de Dios.....	3
Paraiso.....	5
Pedro Miguel.....	5
Porto Bello.....	5
San Pablo.....	4
Tabernilla.....	5
Toro Point.....	3
Total.....	1, 397

HOSPITAL CASES OF MALARIA AMONG EMPLOYEES.

Months.	Discharged.		Died.		Total.	Annual average per 1,000 of deaths.	Annual average per 1,000 of cases.	Number of em- ployees.
	W.	C.	W.	C.	Cases.			
January.....	229	247	....	4	480	0.96	115	49,961
February.....	199	159	....	2	358	.00	85	50,725
March.....	263	267	....	2	532	.47	125	51,199
April.....	248	189	1	....	438	.22	97	54,293
May.....	268	344	....	1	613	.23	139	52,863
June.....	629	624	1	7	1,261	1.85	290	51,767
July.....	828	919	5	5	1,757	2.31	406	51,871
August.....	746	675	2	1	1,424	.71	337	50,638
September.....	476	404	1	2	883	.71	211	50,207
October.....	364	253	2	....	619	.49	150	49,460
November.....	316	241	1	3	561	.99	139	48,260
December.....	305	253	....	3	561	.74	139	48,386
Total.....	4,871	4,575	13	28	9,487	.81	187	50,802

UNIVERSITY OF FLORIDA



3 1262 08229 055 1

614.098

I872

SCI-HSSL

